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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CLIFTON A. RAU

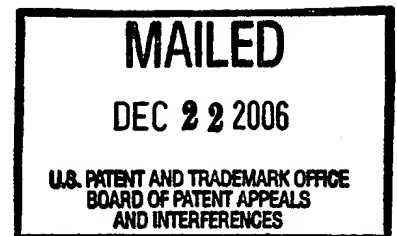
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Appeal No. 2007-0019  
Application 09/850,149<sup>1</sup>

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ON BRIEF

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Before BARRETT, DIXON, and HOMERE, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from  
the final rejection of claims 1-11, 13-15, and 18-20.

Claims 12, 16, and 17 have been canceled.

We affirm-in-part.

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<sup>1</sup> Application for patent filed May 8, 2001, entitled "Model  
Railroad Control and Display System."

BACKGROUND

The invention relates to model railroad systems.

Claim 20 is reproduced below.

20. A model railroad system comprising:

a graphical user interface displaying a representation of said model railroad system on a display, wherein a first portion of said model railroad layout is displayed using a first visual characteristic and a second portion of said model railroad layout is displayed using a second visual characteristic, wherein said first portion is selected to allow train movement thereon, and wherein said second portion is deselected to prevent train movement thereon;

said graphical user interface including an editing function that selectively permits a user to, [sic, no comma] rotate, move, delete and join a track portion based on a type of track portion which is selected; and

an interface unit controlled by said graphical user interface to translate a command received from a computer into a motor control command for controlling at least one element within a model railroad system, said interface unit including:

a plurality of addressable units for receiving address information and data information within said command, wherein one of said plurality of addressable units that corresponds to said address information within said command translates said data information into said motor control command and outputs said motor control command, wherein said plurality of addressable units includes a set of decoders and a plurality of addressable registers, and wherein said command includes three address bits, four group bits and one data bit.

THE REFERENCE

The examiner relies on the following reference:

Tanner et al. (Tanner) 6,445,150 September 3, 2002  
(filed September 22, 2000)

THE REJECTION

Claims 1-11, 13-15, and 18-20 stand rejected under  
35 U.S.C. § 102(b) as being anticipated by Tanner.

We refer to the final rejection (pages referred to as  
"FR\_\_") entered July 26, 2005, and the examiner's answer (pages  
referred to as "EA\_\_") entered June 28, 2006, for a statement of  
the examiner's rejection, and to the corrected brief (pages  
referred to as "Br\_\_") received April 27, 2006, and reply brief  
(pages referred to as "RBr\_\_") received August 29, 2006, for a  
statement of appellant's arguments thereagainst.

DISCUSSION

Claim 20

Although appellant refers to limitations "a)," "b)," and  
"c)," and reproduces claim 20 with these letters, claim 20 does  
not actually contain these letters. Accordingly, the letters  
are used for reference purposes only.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim. A prior art disclosure that 'almost' meets that standard may render the claim invalid under § 103; it does not 'anticipate.'" Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983).

(1)

Appellant argues that Tanner does not disclose "a first portion of said model railroad layout is displayed using a first visual characteristic and a second portion of said model railroad layout is displayed using a second visual characteristic, wherein said first portion is selected to allow train movement thereon, and wherein said second portion is deselected to prevent train movement thereon." It is argued that the "polarity buttons" of Tanner for visual control of the direction of the turnout is not the same as providing the claimed visual characteristics which inform the user which portions of the layout are active/inactive (Br8).

The examiner refers to column 15, lines 21-37 (EA7-8) and column 13, lines 24-35 and Fig. 10 (EA8-9).

Appellant replies that the cited portions of Tanner do not specifically show the claimed relationships between visual characteristics and allowing train movement (RBr3).

The examiner relies on the description of Fig. 16 at column 15, where the software can enable/disable certain sections of a layout (EA7-8). While it may have been trivially obvious to display the enabled/disabled sections using different visual characteristics so that the user knows which sections are enabled/disabled, this is not taught at column 15. This anticipation reasoning by the examiner is not persuasive.

The examiner also relies on the teaching at column 13, lines 24-35, of using a color-coded screen interface to indicate portions of a layout used by different cabs (engines) in different colors in complex layouts. While it may have been trivially obvious to one of ordinary skill in the model railroad art to display the selected/deselected portions of the track layout in different colors in view of this teaching, Tanner only discloses displaying the layout for separate cabs in different colors, not selection/deselected portions of the track layout. This anticipation reasoning by the examiner is not persuasive.

However, we find that the polarity buttons satisfy the limitation. The claim limitation requires that the first and second visual characteristics indicate selection/deselection of portions of the model railroad layout. The polarity buttons of Tanner visually control the direction of travel of the turnout using radio buttons (col. 9, lines 44-45) and, thus, have first and second visual characteristics (dot or no dot) that indicate selection/deselection of train movement. The polarity buttons display first and second portions of the model railroad layout that are selected/deselected, as broadly claimed, because one can determine the portion of the track that is selected/deselected by following the buttons: claim 20 does not specifically require that the visual characteristic is a visual characteristic of the track. Thus, we find that Tanner teaches different visual characteristics, as claimed.

(2)

Appellant argues that Tanner does not disclose "an editing function that selectively permits a user to, rotate, move, delete and join a track portion based on a type of track portion which is selected" (emphasis added).

The examiner responds that Tanner discloses straight track, curved track, and turnouts (EA9-10).

Appellants reply that Tanner does not disclose an editing function that selectively permits rotating, moving, deleting, and joining a track portion based on a type of track portion which is selected (RBr3).

The examiner's reasoning that Tanner has different types of track does not address appellant's arguments. Tanner discloses that the interface "can be customized to conform to a user's specific layout" (col. 10, lines 3-4) and "the visual controls . . . can be rearranged in the shape of a track layout, such as that shown in FIG. 13" (col. 15, lines 38-40). Nevertheless, Tanner does not disclose how the layout is created and does not appear that the limitations at issue are inherent (nor does the examiner rely on inherency). Thus, we find that this limitation is not taught by Tanner.

(3)

Appellant argues (Br8-9) that Tanner does not disclose "wherein said plurality of addressable units includes a set of decoders and a plurality of addressable registers, and wherein

said command includes three address bits, four group bits and one data bit."

The examiner finds that Tanner discloses four- and eight-bit addressing schemes. The examiner admits this is different from what is claimed, "but fails to see the patentable distinction" (EA10). The examiner states that "[t]he recited features are a subset of that disclosed in Tanner" (EA10).

Appellant replies that since the examiner admits that Tanner is different, Tanner does not anticipate (RBr4). It is argued that the claimed combination reflects an intended data architecture that is unique and, "[f]or example, Tanner does not teach or suggest a signaling architecture which in any way contemplates designating addressable 'groups' as does the claimed combination" (RBr4).

If the examiner was correct that the claimed command bits was a subset of Tanner, we would agree that the claim limitation would be anticipated, i.e., three address bits is anticipated by four address bits since the claim does not preclude additional bits. Nevertheless, the examiner has not shown that the bits are a subset of Tanner. It is not clear exactly what the



difference is between the disclosed address bits and the group bits. The specification discloses that the three-bit address field and four-bit group field permit 128 solenoid-type turnouts to be addressed or 64 rotational motor-type turnouts to be addressed (page 6, lines 12-13). The three address bits go to addressable registers and the four group bits go to decoders to enable one of sixteen group signals (page 9, lines 15-20). The data bit is a 1 or a 0 to indicate a "straight" or "turned" path through a turnout (page 6, lines 15-16). It appears that the address and group bits together can be termed address bits. Tanner discloses an eight-bit (one byte) solenoid address where two solenoid driver ports are used for each solenoid motor, one to drive the motor forward and one to drive the motor in reverse (col. 10, lines 31-51), but this does not have a data bit since the address defines the data. (Perhaps, the addresses could be arranged so that the last bit is 1 for one direction and 0 for the reverse direction, but this is not taught.) In a multi-cab embodiment, a four-bit addressing scheme with a decoder is taught (col. 14, lines 42-51), but this again lacks an express

data bit. The examiner has not established that this limitation of the number and type of bits is taught by Tanner.

Conclusion

Because Tanner does not disclose "an editing function that selectively permits a user to, rotate, move, delete and join a track portion based on a type of track portion which is selected" and "said command includes three address bits, four group bits and one data bit," the rejection of claim 20 is reversed.

Claims 1-10, 18, and 19

Appellant argues (Br9) that Tanner does not disclose displaying selected/deselected portions using first and second visual characteristics, as recited in claim 1, for the reasons discussed in connection with claim 20. Because we found in connection with claim 20 that Tanner does disclose this limitation, as broadly recited, we sustain the rejection of claim 1. We also sustain the rejection of claims 2-10, which have not been separately argued.

Claims 11 and 13-15

Appellant argues (Br9) that Tanner does not disclose "wherein said plurality of addressable units includes a set of decoders and a plurality of addressable registers, and wherein said command includes three address bits, four group bits and one data bit." For the reasons stated in the analysis of claim 20, we agree that this limitation is not anticipated. The rejection of claims 11 and 13-15 is reversed.

Claims 18 and 19

Appellant argues that Tanner does not disclose the specifics of the editing in claim 18 and of the use of red and green visual characteristics in claim 19 (Br9-10).

The examiner states (EA11): "Appellants have not explained why the use of 'red' and 'green' is thought to be a patentable feature in this context. 'Red' is known to represent stop and 'green' is known to represent go."

The examiner does not explain where the limitations are taught by Tanner, and we do not find these teachings in Tanner. The examiner's statements relate to obviousness, not anticipation. The rejection of claims 18 and 19 is reversed.

Appeal No. 2007-0019  
Application 09/850,149

## CONCLUSION

The rejection of claims 1-10 is sustained.

The rejection of claims 11, 13-15, and 18-20 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (2004).

AFFIRMED-IN-PART

LEE E. BARRETT

LEE E. BARRETT  
Administrative Patent Judge

*Joseph A. Califano*

JOSEPH L. DIXON  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS  
AND  
INTERFERENCES

Jean R. Homere

JEAN R. HOMERE  
Administrative Patent Judge

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CLIFTON A. RAU  
P.O. Box 128  
QUINCY, PA 17247